

Item no.: 397840
RUTM51

from **334,54 EUR**

Item no.: 397840
shipping weight: 0.60 kg
Manufacturer: Teltonika



 Product Description

The RUTM51 is a budget-friendly dual-SIM, multi-network industrial 5G router delivering connectivity for data-heavy applications. With five Gigabit Ethernet ports, dual-band Wi-Fi, and auto-failover, it ensures seamless, reliable performance. Backward compatibility with 4G Cat 12 and a versatile range of interfaces make the RUTM51 5G router a smart, future-proof choice for businesses seeking high-speed connectivity at a lower cost.

COST-EFFICIENT 5G Top-tier 5G speeds at an unbeatable price point

DUAL SIM With auto failover, backup WAN and other switching scenarios

SA & NSA Supports both architectures to leverage the 5G infrastructure

FUTURE-PROOFING Backward compatible with 4G (LTE Cat 12)

MOBILE- Mobile module 5G Sub-6GHz SA: 2 Gbps DL, 1 Gbps UL; NSA: 2.6 Gbps DL, 650 Mbps UL; 4G (LTE) - Cat 12: 600 Mbps DL, Cat 13: 150 Mbps DL; 3G - 42.2 Mbps DL, 11 Mbps UL - 3GPP Release 15- SIM switch

2 SIM cards, auto-switch cases: weak signal, data limit, SMS limit, roaming, no network, network denied, data connection fail, SIM idle protection - Status

MSIS, ICCID, operator, operator state, data connection state, network type, CA indicator, bandwidth, connected band, signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP, data sent/received, LAC, TAC, cell ID, ARFCN, EARFCN, MCC, and MNC - SMSSMS status, SMS configuration, send/read SMS via HTTP POST/GET, EMAIL to SMS, SMS to EMAIL, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP - USSD status sending and reading

Unstructured Supplementary Service Data messages- Black/White list Operator black/white list (by country or separate operators) - Band management

Band lock, Used band status display - SIM idle protection service When working with devices with two SIM slots, the one not currently in use will remain idle until the device switches to it, meaning that no data is used on the card until then - SIM PIN code management

SIM PIN code management enables setting, changing, or disabling the SIM card's PIN - APN

Auto APN - Bridge Direct connection (bridge) between mobile ISP and device on LAN - Passthrough

Router assigns its mobile WAN IP address to another device on LAN

WIRELESS - Wireless mode 802.11b/g/n/ac Wave 2 (Wi-Fi 5) with data transmission rates up to 867 Mbps (Dual Band, MU-MIMO), 802.11r fast transition, Access Point (AP), Station (STA) - Wi-Fi security

WPA2-Enterprise: PEAP, WPA2-PSK, WPA-EAP, WPA-PSK, WPA3-SAE, WPA3-EAP, OWE; AES-CCMP, TKIP, Auto-cipher modes, client separation, EAP-TLS with PKCS#12 certificates, disable auto-reconnect, 802.11w Protected Management Frames (PMF) - SSID/ESSID/SSID stealth mode - Wi-Fi users Up to 150 simultaneous connections - Wireless Connectivity Features

Wireless mesh (802.11s), fast roaming (802.11r), Relayd, BSS transition management (802.11v), radio resource measurement (802.11k) - Wireless MAC filter Whitelist, blacklist - Wireless QR code generator

Once scanned, a user will automatically enter your network without needing to input login information. ETHERNET - WAN1 x WAN port 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, IEEE 802.3az standards, supports auto MDI/MDIX crossover

LAN 4 x LAN ports, 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossover

NETWORK - Routing Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing - Network protocols

TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SFTP, FTP, SMTP, SSL/TLS, ARP, VRRP, PPTP, PPPoE, UPNP, SSH, DHCP, Telnet, SMPP, SNMP, MQTT, Wake On Lan (WOL), VXLAN - VoIP passthrough support H.323 and SIP - alg protocol NAT helpers, allowing proper routing of VoIP packets - Connection monitoring

Ping Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection - Firewall Port forward, traffic rules, custom rules, TTL target customisation - Firewall status page

View all your Firewall statistics, rules, and rule counters - Ports management View device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on - Network topology

Visual representation of your network, showing which devices are connected to which other devices - DHCP Static and dynamic IP allocation, DHCP relay, DHCP server configuration, status, static leases: MAC with wildcards - QoS / Smart Queue Management (SQM)

Traffic priority queuing by source/destination, service, protocol or port, WMM, 802.11e - DDNS Supported >25 service providers, others can be configured manually - DNS over HTTPS

SDNS over HTTPS proxy enables secure DNS resolution by routing DNS queries over HTTPS - Network backup

Wi-Fi WAN, Mobile, VRRP, Wired options, each of which can be used as an automatic failover - Load balancing

Balance Internet traffic over multiple WAN connections - Hotspot Captive portal (hotspot), internal/external Radius server, Radius MAC authentication, SMS authorisation, SSO authentication, internal/external landing page, walled garden, user scripts, URL parameters, user groups, individual user or group limitations, user management, 9 default customisable themes and optionality to upload and download customised hotspot themes - SSH

F Possibility to mount remote file system via SSH protocol - VRF support

Initial virtual routing and forwarding (VRF) support - Traffic Management Real-time monitoring, wireless signal charts, traffic usage history

SECURITY - Authentication Pre-shared key, digital certificates, X.509 certificates, TACACS+, Internal & External RADIUS users authentication, IP & login attempts block, time-based login blocking, built-in random password generator - Firewall

Pre-configured firewall rules can be enabled via WebUI, unlimited firewall configuration via CLI; DMZ; NAT; NAT-T - Attack prevention DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks) - VLAN

Port and tag-based VLAN separation - Mobile quota control Mobile data limit, customizable period, start time, warning limit, phone number - WEB filter

Blacklist for blocking out unwanted websites, Whitelist for specifying allowed sites only - Access control Flexible access control of SSH, Web interface, CLI and Telnet - SSL certificate generation

Let's encrypt support - 802.1x Port-based network access control

client VPN - OpenVPN Multiple clients and a server can run simultaneously, 27 encryption methods - OpenVPN Encryption

DES-CBC 64, RC2-CBC 128, DES-EDE-CBC 128, DES-EDE3-CBC 192, DESX-CBC 192, BF-CBC 128, RC2-40-CBC 40, CAST5-CBC 128, RC2-64-CBC 64, AES-128-CBC 128, AES-128-CFB 128, AES-128-CFB1 128, AES-128-CFB8 128, AES-128-OFB 128, AES-128-GCM 128, AES-192-CFB 192, AES-192-CFB1 192, AES-192-CFB8 192, AES-192-OFB 192, AES-192-CBC 192, AES-192-GCM 192, AES-256-GCM 256, AES-256-CFB 256, AES-256-CFB1 256, AES-256-CFB8 256, AES-256-OFB 256, AES-256-CBC 256 - IPsec XFRM, IKEv1, IKEv2, with 14 encryption methods for IPsec (3DES, DES, AES128, AES256, AES128GCM8, AES192GCM8, AES256GCM8, AES128GCM12, AES192GCM12, AES256GCM12, AES128GCM16, AES192GCM16, AES256GCM16) - GRE

GRE tunnel, GRE tunnel over IPsec support - PPTP, L2TP Client/Server instances can run simultaneously, L2TPv3, L2TP over IPsec support - Stunnel

Proxy designed to add TLS encryption functionality to existing clients and servers without any changes in the program's code - DMVPN Method of building scalable IPsec VPNs, Phase 2 and Phase 3 and Dual Hub support - SSTP

SSTP client instance support - ZeroTier ZeroTier VPN client support - WireGuard

WireGuard VPN client and server support - Tinc Tinc offers encryption, authentication and compression in its tunnels. Client and server support - Tailscale

Tailscale offers speed, stability, and simplicity over traditional VPNs. Encrypted point-to-point connections using the open source WireGuard protocol

OPC UA - Supported modes Client, Server - Supported connection types

TCP/MODBUS - Supported modes Server, Client - Supported connection types

TCP, USB - Custom registers MODBUS TCP custom register block requests, which read/write to a file inside the router, and can be used to extend MODBUS TCP client functionality - Supported data formats

8-bit: INT, UINT; 16-bit: INT, UINT (MSB or LSB first); 32-bit: float, INT, UINT (ABCD (big-endian), DCBA (little-endian), CDAB, BADC), HEX, ASCII DATA TO SERVER - Protocol

HTTP(S), MQTT, Azure MQTT, Kinesis - Data to server Extract parameters from multiple sources and different protocols, and send them all to a single server; Custom LUA scripting, allowing scripts to utilize the router's Data to server feature

MQTT GATEWAY - Modbus MQTT Gateway Allows sending commands and receiving data from MODBUS Server through MQTT broker

DNP3 - Supported modes Station, Outstation - Supported connection

TCP, USB DLMS - DLMS Support

DLMS - standard protocol for utility meter data exchange - Supported modes Client API - Teltonika Networks Web API (beta) support

Expand your device's possibilities by using a set of configurable API endpoints to retrieve or change data. For more information, please refer to this documentation: <https://developers.teltonika-networks.com>

MONITORING & MANAGEMENT - WEB UI HTTP/HTTPS, status, configuration, FW update, CLI, troubleshooting, multiple event log servers, firmware update availability notifications, event log, system log, kernel log, Internet status - FOTA

Firmware update from server, automatic notification - SSH SSSH (v1, v2) - SMSSMS status, SMS configuration, send/read SMS via HTTP POST/GET - Call

Reboot, Status, Mobile data on/off, Output on/off, answer/hang-up with a timer, Wi-Fi on/off - TR-069 OpenACS, EasyCwmp, ACSLite, tGem, LibreACS, GenieACS, FreeACS, LibCwmp, Friendly tech, AVSystem - MQTT

MQTT Broker, MQTT publisher - SNMP SNMP (v1, v2, v3), SNMP Trap, Brute force protection - JSON-RPC

Management API over HTTP/HTTPS - MODBUS MODBUS TCP status/control - RMS

Teltonika Remote Management System (RMS) IOT PLATFORMS - ThingWorx Allows monitoring of: WAN Type, WAN IP, Mobile Operator Name, Mobile Signal Strength, Mobile Network Type - Cumulocity - Cloud of Things

Allows monitoring of: Device Model, Revision and Serial Number, WAN Type and IP, Mobile Cell ID, ICCID, IMEI, Connection Type, Operator, Signal Strength. Has reboot and firmware upgrade actions - Azure IoT Hub

Can be configured with Data to Server to send all the available parameters to the cloud. Has Direct method support which allows to execute RutOS API calls on the IoT Hub. Also has Plug and Play integration with Device Provisioning Service that allows zero-touch device provisioning to IoT Hubs

SYSTEM CHARACTERISTICS - CPU MediaTek, Dual-core, 880 MHz, MIPS1004K - RAM

256 MB, DDR3 - FLASH storage

16MB serial NOR flash, 256MB serial NAND flash

FIRMWARE / CONFIGURATION - WEB UI Update FW from file, check FW on server, configuration profiles, configuration backup - FOTA

Update FW - RMS Update FW/configuration for multiple devices at once - Keep settings

Update FW without losing current configuration - Factory settings reset

A full factory reset restores all system settings, including the IP address, PIN, and user data to the default manufacturer's configuration

FIRMWARE CUSTOMISATION - Operating system RutOS (OpenWrt based Linux OS) - Supported languages

Busybox shell, Lua, C, C++ - Development tools SDK package with build environment provided - GPL customization

You can create your own custom, branded firmware and web page application by changing colours, logos, and other elements in our firmware to fit your or your clients' needs - Package Manager The Package Manager is a service used to install additional software on the device

USB - Data rate USB 2.0 - Applications

Samba share, USB-to-serial - External devices Possibility to connect external HDD, flash drive, additional modem, printer, USB-serial adapter - Storage

formats FAT, FAT32, exFAT, NTFS (read-only), ext2, ext3, ext4

INPUT / OUTPUT - Input x Configurable digital Input, 0 - 6 V detected as logic low, 8 - 50 V detected as logic high - Output

1 x Configurable digital Output, Open collector output, max output 50 V, 300 mA - Events

Email, RMS, SMS - I/O juggler Allows to set certain I/O conditions to initiate event

POWER - Connector 4-pin industrial DC power socket - Input voltage

range 9 - 50 VDC, reverse polarity protection, surge protection >51 VDC

10us max - PoE (passive) Possibility to power up through LAN1 port, not compatible with IEEE 802.3af, 802.3at and 802.3bt standards, Mode B, 9 - 50 VDC - Power consumption

Idle: <5 W, Max: <18 W

PHYSICAL INTERFACES - Ethernet 5 x RJ45 ports, 10/100/1000 Mbps - I/O

s1 x Digital Input, 1 x Digital Output on 4-pin power connector - Status LEDs

3 x connection status LEDs, 3 x connection strength LEDs, 10 x Ethernet port status LEDs, 4 x WAN status LEDs, 1 x Power LED, 2 x 2.4G and 5G Wi-Fi LEDs - SIM 2 x SIM slots (Mini SIM - 2FF), 1.8 V/3 V - Power

1 x 4-pin power connector - Antennas 4 x SMA for Mobile, 2 x RP-SMA for Wi-Fi - USB

1 x USB A port for external devices - Reset/Reboot/User default reset/Factory reset button Other

1 x Grounding screw

PHYSICAL SPECIFICATION - Casing material Aluminium housing - Dimensions (W x H x D)

132 x 44.2 x 95.0 mm - Weight 525 g - Mounting options

DIN rail, wall mount, flat surface (all require additional kit)

OPERATING ENVIRONMENT - Operating temperature -40 °C to 75 °C - Operating humidity

10% to 90% non-condensing - Ingress Protection Rating

IP30 REGULATORY & TYPE APPROVALS - CE, UKCA, EAC, UCRF, RCM, WEEE, CBEM

EMISSIONS & IMMUNITY - Standards EN 55032:2015 + A11:2020 + A1:2020EN 55035:2017 + A11:2020EN 61000-3-3:2013 + A1:2019 + A2:2021EN IEC 61000-3-2:2019 + A1:2021EN 301 489-1 V2.2.3EN 301 489-3 V2.3.2EN 301 489-17 V3.2.4EN 301 489-52 V1.2.1AS/NZS CISPR 32:2015 + A1:2020 - ESDEN 55032:2015 + A11:2020 + A1:2020EN 55035:2017 + A11:2020EN 61000-3-3:2013 + A1:2019 + A2:2021EN IEC 61000-3-2:2019 + A1:2021EN 301 489-1 V2.2.3EN 301 489-3 V2.3.2EN 301 489-17 V3.2.4EN 301 489-52 V1.2.1AS/NZS CISPR 32:2015 + A1:2020 - Radiated Immunity

EN 61000-4-3:2006 + A1:2008 + A2:2010, EN IEC 61000-4-3:2020 - EFTEN 61000-4-4:2012, EN 61000-4-4:2012 - Surge Immunity (AC Mains Power Port) EN 61000-4-5:2014 + A1:2017, EN 61000-4-5:2014 + A1:2017 - CSEN 61000-4-6:2014 - DIPEN 61000-4-11:2020RF - Standards

EN 300 328 V2.2.2EN 301 893 V2.1.1EN 300 440 V2.2.1EN 301 908-1 V15.2.1EN 301 908-2 V13.1.1EN 301 908-13 V13.2.1EN 301 908-25 V15.1.1AS/NZS 4268:2017 + A1:2021AS/CA S042.1:2022AS/CA S042.4:2022AS/CA S042.5:2022 + A1:2022FCC Part 22SAFETY - Standards EN IEC 62311:2020EN IEC 62368-1:2020 + A11:2020AS/NZS 2772.2:2016 + A1:2018

Specifications

Scan this QR code to view the product
All details, up-to-date prices and availability

